

CLAIMS

[1] A stabilizer control apparatus, comprising:

a first stabilizer bar disposed at either the front wheels or the rear wheels of a vehicle;

5 a second stabilizer bar disposed at the other of the front wheels and the rear wheels;

a first driving means, disposed between the two ends of the first stabilizer bar, that can be driven so as to contort the first stabilizer bar between its two ends;

10 a second driving means, disposed between the two ends of the second stabilizer bar, that can be driven so as to contort the second stabilizer bar between its two ends;

a roll detecting means for detecting rolling of the vehicle;

a first control means, which, in the event that the roll detecting means has detected rolling of the vehicle, outputs to at least one of the first driving means and the second driving means a driving signal contorting at least one of the first stabilizer bar and the second stabilizer bar, so that a resisting rolling moment that counters the rolling acts on the vehicle; and

a second control means, which, in the event that an irregularity is detected that one of the first stabilizer bar and the second stabilizer bar is stuck in a contorted state such that a rolling moment to one side acts on the vehicle, outputs a driving signal contorting the other of the first stabilizer bar and the second stabilizer bar in a direction where the rolling moment to the one side is compensated, to the first driving means or the second driving means that drives the that other stabilizer bar.

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[2] A stabilizer control apparatus, comprising:

a first stabilizer bar disposed at either the front wheels or the rear wheels of a vehicle;

a second stabilizer bar disposed at the other of the front wheels and the rear wheels;

a first driving means, disposed between the two ends of the first stabilizer bar, that can be driven so as to contort the first stabilizer bar
5 between its two ends;

a second driving means, disposed between the two ends of the second stabilizer bar, that can be driven so as to contort the second stabilizer bar between its two ends;

a roll detecting means for detecting rolling of the vehicle;

10 a first control means, which, in the event that the roll detecting means has detected rolling of the vehicle, outputs to at least one of the first driving means and the second driving means a driving signal contorting at least one of the first stabilizer bar and the second stabilizer bar, so that a resisting rolling moment that counters the rolling acts on the vehicle; and

15 a second control means, which, in the event that an irregularity is detected that one of the first stabilizer bar and the second stabilizer bar is stuck in a contorted state, outputs a driving signal contorting the other of the first stabilizer bar and the second stabilizer bar such that tilting of the chassis of the vehicle is suppressed, to the first driving means or the second
20 driving means that drives the that other stabilizer bar.

[3] The stabilizer control apparatus according to claim 1 or 2,

wherein, in the event that the irregularity has been detected, the second control means outputs a driving signal of an amount that corresponds to the driving amount of the first driving means or the second driving means
25 that drives the first stabilizer bar or the second stabilizer bar where the irregularity was detected, to the first driving means or the second driving means driving the other of the first stabilizer bar and the second stabilizer bar.

[4] The stabilizer control apparatus according to claim 1 or 2,
further comprising contortion detecting means for detecting the
degree of contortion of the first stabilizer bar and the second stabilizer bar;

wherein the second control means detects the irregularity of the first
5 stabilizer bar from a set contortion value of the first stabilizer bar in
accordance with the driving signal of the first control means and from the
detection result of the contortion detection means, and detects the
irregularity of the second stabilizer bar from a set contortion value of the
second stabilizer bar in accordance with the driving signal of the first control
10 means and from the detection result of the contortion detection means.

[5] A stabilizer control apparatus, comprising:

a first stabilizer bar disposed at either the front wheels or the rear
wheels of a vehicle;

a second stabilizer bar disposed at the other of the front wheels and
15 the rear wheels;

a first driving means, disposed between the two ends of the first
stabilizer bar, that can be driven so as to contort the first stabilizer bar
between its two ends;

a second driving means, disposed between the two ends of the second
20 stabilizer bar, that can be driven so as to contort the second stabilizer bar
between its two ends;

a roll detecting means for detecting rolling of the vehicle;

a first control means, which, in the event that the roll detecting
means has detected rolling of the vehicle, outputs to the first driving means
25 and the second driving means a driving signal contorting the first stabilizer
bar and the second stabilizer bar, so that a resisting rolling moment that
counters the rolling acts on the vehicle; and

a second control means, which, in the event that an irregularity is

detected that the first stabilizer bar is stuck in a contorted state such that a rolling moment in one direction acts on the vehicle, outputs to the second driving means a driving signal contorting the second stabilizer bar such that a rolling moment in the other direction countering the rolling moment in the one direction acts on the vehicle.

[6] A stabilizer control apparatus, comprising:

a first stabilizer bar disposed at either the front wheels or the rear wheels of a vehicle;

a second stabilizer bar disposed at the other of the front wheels and the rear wheels;

a first driving means, disposed between the two ends of the first stabilizer bar, that can be driven so as to contort the first stabilizer bar between its two ends;

a second driving means, disposed between the two ends of the second stabilizer bar, that can be driven so as to contort the second stabilizer bar between its two ends;

a roll detecting means for detecting rolling of the vehicle;

a first control means, which, in the event that the roll detecting means has detected rolling of the vehicle, outputs to the first driving means and the second driving means a driving signal contorting the first stabilizer bar and the second stabilizer bar, so that a resisting rolling moment that counters the rolling acts on the vehicle; and

a second control means, which, in the event that an irregularity is detected that the first stabilizer bar is stuck in a contorted state, outputs to the second driving means a driving signal contorting the second stabilizer bar such that tilting of the chassis of the vehicle is suppressed.

[7] The stabilizer control apparatus according to claim 5 or 6,

further comprising a contortion detection means for detecting the

degree of contortion of the first stabilizer bar,

wherein the second control means detects the irregularity from a set contortion value of the first stabilizer bar in accordance with the driving signal of the first control means and from the detection result of the contortion detection means.

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[8] The stabilizer control apparatus according to any of the claims 1, 2, 5 or 6,

further comprising an alarm device;

wherein the second control means outputs a signal for issuing an alarm to the alarm device in the event that an irregularity is detected.

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